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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/630,011	07/30/2003	Walter Kolb	8934-95US (20 009)	8531

570 7590 03/11/2005

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2005 MARKET STREET, SUITE 2200
PHILADELPHIA, PA 19103-7013

EXAMINER

MAMMEN, NATHAN SCOTT

ART UNIT	PAPER NUMBER
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3671

DATE MAILED: 03/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/630,011

Applicant(s)

KOLB ET AL.

Examiner

Nathan S Mammen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 November 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 and 14-35 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 31-35 is/are allowed.
- 6) ☒ Claim(s) 1-12, 14, 15, 20, 21 and 23-30 is/are rejected.
- 7) ☒ Claim(s) 16-19, 22 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 11/26/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

1. Claim 1 is objected to because of the following informalities: Claim 1 recites “at least one rotating blade” in lines 1 and 2 but then proceeds to refer to “axially adjacent blades” in line 7. For purposes of clarity, it is recommended that the first limitation be changed to “at least two axially adjacent rotating blades.” Appropriate correction is required.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 2, 5-12, 14, 15, 20, 21, 28-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 2,790,294 to Marich, cited by Applicant, in view of U.S. Patent No. 980,072 to Cramer.

The Marich '294 patent discloses a cutting device for plants comprising at least one rotating cutting blade (20) that cooperates with a stationary counter-blade (col. 1, lines 18 and 56-58). The rotating cutting blade is curved (at 22) and is arranged in oblique planes around the axis of rotation (Fig. 1). The rotating cutting blade is replaceably arranged in a blade support (14), and the blade is held by a snap connection (col. 2, lines 2-9) in the blade support (14). What the Marich '294 patent does not disclose is that the axially adjacent blades are oriented partially non-parallel but oppositely to one another. The Cramer '072 patent teaches that it is

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known in the art to provide a cutting device for plants with axially adjacent blades (13) that are oriented non-parallel but oppositely to each other. See Fig. 2. It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the cutting device of the Marich '294 patent with the orientation for axial adjacent blades as taught by the Cramer '072 patent in order to prevent cut grass from being delivered to one side of the cutting device. See Cramer, page 1, line 111 – page 2, line 6.

Regarding claims 2, 5-12, 14, 15, 20, 21, 28-30: The blade (20) is mounted in a slot (18) of the blade support (14). The cutting device has plural slots provided in succession and running approximately axially (see Fig. 1). The blade supports are connectable to a drive shaft (10) by plug-in connections (12, 16) comprising axially running slots (12). The blades extend less than 100 degrees of a circular arc running around the rotation axis (See Figs. 1 and 2). At least three blades (20) are arranged in succession in a peripheral direction (See Fig. 1). The blade is connected at the edge opposite to the cutting edge to a guide element (22), which is positively latched in the blade support (col. 2, lines 2-9). The blade (20) inherently includes a spring metal strip. (See col. 1, line 56, and col. 1, line 67 – col. 2, line 1. Conventional mower blades are metal – and the base (22) of the blade as a spring or resilience.) The blade (20) is arranged such that it has an angle of at most 35 degrees to the axis of rotation (see Figs. 2, 3, 5). The cutting device is a lawnmower.

4. Claims 1-6, 23-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over GB 402,223 in view of U.S. Patent No. 980,072 to Cramer.

The GB '223 patent publication discloses a cutting device for plants comprising at least one rotating cutting blade (1a) that cooperates with a stationary counter-blade (5). The rotating

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cutting blade is curved (Fig. 4) and is arranged in oblique planes around the axis of rotation (Fig. 3). The rotating cutting blade is replaceably arranged in a blade support (6, 7, 15), and the blade is held by a snap connection (19) in the blade support. What the GB '223 patent publication does not disclose is that the axially adjacent blades are oriented partially non-parallel but oppositely to one another. The Cramer '072 patent teaches that it is known in the art to provide a cutting device for plants with axially adjacent blades (13) that are oriented non-parallel but oppositely to each other. See Fig. 2. It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the cutting device of the GB '223 patent publication with the orientation for axial adjacent blades as taught by the Cramer '072 patent in order to prevent cut grass from being delivered to one side of the cutting device. See Cramer, page 1, line 111 – page 2, line 6.

Regarding claims 2-6: The blades are mounted in a plurality of slots (formed by the neck 16), which run axially to the blade. The blade is inserted transversely to its longitudinal direction into the slots, then lockable in the slots by axial displacement and the engagement of elastic latching element (19).

Regarding claims 23-25: The blade (1a) and counter-blade are biased relative to one another by a spring element (15), which is formed directly on the blade support (6, 7).

5. Claims 26 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 2,790,294 to Marich, cited by Applicant, in view of U.S. Patent No. 980,072 to Cramer and further in view of U.S. Patent No. 1,903,183 to Jessup.

The combination of the Marich '294 and Cramer '072 patents discloses the claimed invention, as stated in paragraph 3 above, but mentions the counter-blade only in passing. The

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Jessup '183 patent discloses a counter-blade for a reel mower, the counter-blade (6') being removably and resiliently mounted (page 2, lines 30-36). It would be obvious to one having ordinary skill in the art at the time the invention was made to provide the cutting device of the combination of the Marich '294 and Cramer '072 patents with the counter-blade of the Jessup '183 patent, in order to provide an arrangement for easily replacing a counter-blade. Regarding the limitation in claim 26 that the counter-blade is divided in the axial segments, replacing a single unitary counter-blade with a counter-blade composed of a plurality of segments would have been obvious to one having ordinary skill in the art.

Response to Arguments

6. Applicant's arguments with respect to claims 1-12, 14, 15, 21, 23-29 have been considered but are moot in view of the new ground(s) of rejection.

Although claim 13 (now incorporated in claim 1) had previously been indicated as allowable, the teachings of the previously undiscovered Cramer '072 patent necessitate the new grounds of rejection.

Allowable Subject Matter

7. Claims 16-19, 22 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

8. Claims 31-35 are allowed.

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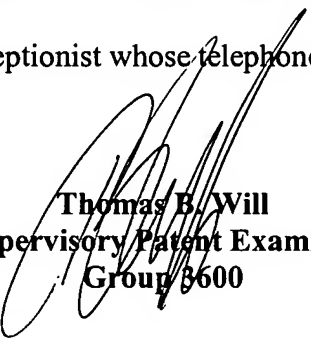
Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nathan Mammen whose telephone number is (703) 306-5959. The examiner can normally be reached Monday through Thursday from 6:30 a.m. to 5:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas B. Will, can be reached at (703) 308-3870. The fax number for this Group is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-1113.


Thomas B. Will
Supervisory Patent Examiner
Group 8600

NSM
3/5/05

Nathan S. Mammen